



The primary operational TBI component of the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury

Brainwaves

DVBIC Brainwaves • Summer 2008

DVBIC Phone: (800) 870-9244 • Website: www.DVBIC.org

Message from

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Welcome to the first issue of *DVBIC Brainwaves*, a quarterly newsletter about our activities in treatment, research and education. This newsletter has been developed in

response to the many requests for a newsletter received from visitors to the DVBIC website.

Since 1992, the DVBIC network of military, veteran and civilian healthcare partners has addressed the needs of service members and families affected by traumatic brain injury (TBI). This mission continues in a new way. I am pleased to announce that on November 30, 2007 DVBIC became the primary operational TBI component of the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE).

The DCoE allows for broader dissemination and coordination across the US Department of Defense (DoD) for our state-of-the-art medical care, research and education initiatives. The DVBIC network collaborates with the US Department of Veterans Affairs (VA) and other federal partners to address all levels of severity in TBI care through a continuum of services: screening, evaluation, treatment, rehabilitation, and return to duty or community re-entry. This array of services would not be possible without our network of professional staff at 16 sites and the many who support our mission.

Our unique combination of services, clinical care, research and education facilitates DVBIC's capacity to learn as we treat, as reflected in the over 100 articles published in peer-reviewed journals.

I hope that you will find this newsletter useful. Each issue of *DVBIC Brainwaves* will feature the most current information on our programs and projects. Please visit us online at DVBIC.org or send an email to info@DVBIC.org. We welcome your feedback and look forward to hearing from you.

"The military now has more thorough reporting mechanisms, requiring that anyone affected by a blast or blunt trauma in theater go through an evaluation and screening. We have a single TBI registry and a single point of responsibility – the Defense and Veterans Brain Injury Center – to consolidate all TBI-related incidents and information."

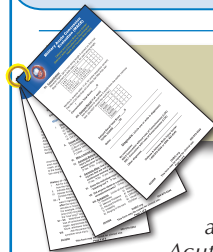


Dr. Robert M. Gates, Secretary of Defense

"We are fortunate to have the experienced collaborations of DVBIC as the primary operational TBI component of DCoE, with their continued track record of success."



BG Loree K. Sutton, MC, USA, Director of DCoE



MACE Used Around the Globe

British Surgeon General Lt. Gen. Louis Lillywhite announced that the Military Acute Concussion Evaluation (MACE) would be used by the British Armed Forces when screening their service members for mild TBI.

What is the MACE?

The MACE is an evaluation tool that takes only five minutes to use and can be administered by first responders in the field who have been trained to use it.

The MACE assesses an individual's clinical status and screens to determine if the service member may have sustained a concussion/mild TBI. The MACE screening includes "red flag" questions which may prompt an immediate referral to a higher level of care.

The MACE has been distributed to all branches of the US military. It is currently used in

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Research Making a Difference

DVBIC conducts research to enhance the quality, appropriateness, timeliness and cost-effectiveness of TBI-related treatments and care. Three kinds of research are underway.

DVBIC Epidemiological Studies answer questions such as 1) incidence and types of TBI sustained in combat and non-combat arenas, 2) symptoms associated with different types of TBI, 3) how TBI affects return to duty or work, and 4) the utility of instruments used to assess symptoms associated with TBI. An example of the latter is DVBIC's 18-month "Head to Head" study comparing five computerized assessment programs to see how well they evaluate cognitive performance, i.e., how well a person remembers things and pays attention. The study focuses on patients with concussion/mild TBI.

DVBIC Clinical Investigations include controlled trials of pharmaceutical and rehabilitative treatments. The Walter Reed randomized controlled clinical trial was the first large scale investigation of two approaches to rehabilitation after a traumatic brain injury (TBI). 120 service members with moderate to moderate-severe TBI were randomized into either a two-month inpatient rehabilitation program or a two-month trial at home with weekly telephone calls from a psychiatric nurse. Outcome measures included return to duty and/or work status after one year. This study found that service members who had sustained more serious injuries benefited from inpatient rehabilitation while there was a trend for those somewhat less seriously injured to benefit from telephone follow-up.

DVBIC Translational Research focuses upon applying basic scientific studies to improvements in the diagnosis, evaluation and treatment of service members and veterans with TBI.

For more information about research efforts and published articles, please visit www.DVBIC.org. Future issues of *DVBIC Brainwaves* will address these programs in further detail.

A **traumatic brain injury (TBI)** is caused by a blow or jolt to the head or a penetrating head injury that disrupts the normal function of the brain. Not all blows or jolts to the head result in a TBI. The severity of a TBI may range from "mild" (a brief change in mental status or consciousness) to "severe" (an extended period of unconsciousness or amnesia after the injury). The terms concussion and mild TBI are interchangeable.

Specialists are not always available when a service member or civilian sustains a traumatic brain injury (TBI). Therefore, DVBIC has established a telemedicine program to help healthcare providers assess and treat TBI in deployed settings or remote locations.

"TBI.consult" is a specialty group of experts in a variety of disciplines (neurologists, neuropsychologists, physiatrists, occupational and physical therapists, etc.) who help address specific medical concerns related to TBI.

Specialty recommendations are made on when and how to screen for TBI, strategies for symptom management (such as headache, sleeplessness, fatigue), return to duty considerations, and areas where neuro-

logical and psychological health concerns overlap.

TBI.consult joins 16 other specialty groups (dermatology.consult, ophthalmology.consult, neurology.consult, etc.) which assist military healthcare providers in meeting the needs of our armed forces around the world. Together these programs help thousands of patients each year by making specialty "e-mail" consultation available in remote locations. Questions generated in theater are expedited through an e-mail network which allows expert clinical responses to be given within five hours.

Military healthcare providers may receive expert TBI consultation at any time by contacting TBI.consult@us.army.mil.

Polytrauma System of Care and TBI

DVBIC and the US Department of Veterans Affairs (VA) Veterans Health Administration are partners in clinical care, education, research and care coordination for veterans and active duty service members who have sustained a traumatic brain injury.

DVBIC core personnel are located at each of the VA Regional Polytrauma Rehabilitation Centers, located in Minneapolis, Palo Alto, Richmond and Tampa; a fifth site is planned for San Antonio. The VA's Polytrauma System of Care (PSC) is comprised of the Regional Polytrauma Rehabilitation Centers; 22 Poly-

trauma Network Sites specializing in components of post-acute rehabilitation care for individuals with polytrauma and traumatic brain injury, including but not limited to inpatient and outpatient rehabilitation programs; 80 Polytrauma Support Clinic Teams and Polytrauma Points of Contact at the remaining VA medical centers.

Members of the Army, Navy, Marine Corps, Air Force, Coast Guard, and National Oceanic and Atmospheric Administration may receive care through the PSC, based on the severity of their injuries and need for rehabilitation.

MACE Used in Deployed Settings and Stateside ... con't. from page 1

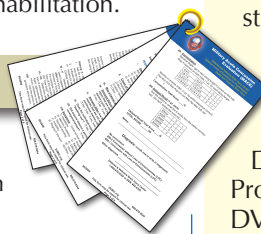
Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) as well as stateside. Developed by DVBIC and available since August 2006, the MACE is being widely used to screen service members with suspected traumatic brain injury.

The MACE has three parts: a focused patient history, a directed exam and a brief neurocognitive assessment tool called the Standardized Assessment of Concussion (SAC; McCrea, et al., 2000). The SAC has been used extensively in sports such as football and soccer to evaluate athletes who may have sustained a

concussion/mild TBI. It is similar to a quick, short-term memory test.

The MACE is available in a variety of formats (full page sheets, wallet cards and laminated pocket cards), making it adaptable to any operational setting. Three versions are available, for repeated use in tracking recovery.

Users report that the tool is easy to administer and provides good clinical information. Copies may be requested by contacting info@DVBIC.org.



SURVIVE, THRIVE & ALIVE!

Understanding Traumatic Brain Injury DVD and User's Guide Now Available

The popular brain injury awareness and prevention DVD, *Understanding Traumatic Brain Injury*, now comes with a user's guide. The new packet includes the DVD, a group leader's planning guide, an awareness and prevention fact sheet on TBI, and an 11" x 17" poster for promoting group events to watch and discuss the DVD.

The documentary is 29 minutes in length, with an introduction by General Colin Powell (Ret). Active duty military personnel, families and TBI healthcare professionals are featured. They provide a real-life perspective from battlefield treatment through community re-entry, focusing mostly on moderate to severe cases of TBI.

The new packet is designed for both medical and lay audiences as well as viewers from the military and general public. The DVD may be viewed independently or used in a group discussion or formal presentation.

Several military, US Government, academic and civilian sector organizations contributed to the DVD, which was created in late 2006. The documentary is continually streamed at DVBIC's official website, www.DVBIC.org.

To request copies of the DVD and user's guide, please contact DVBIC's Office of Educational Programs by emailing education@DVBIC.org or calling (800) 870-9244.

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